

## **CLAIMS**

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### **WHAT IS CLAIMED IS:**

1. A self-closing hinge system, comprising:

2 a shaft;

a first leaf member rotationally coupled to said shaft; and

4 a second leaf member rotationally coupled to said shaft;

6 wherein said first and second members each include an oblique edge  
abutting the other oblique edge, such that a horizontal force on the two members is  
translated into a horizontal and vertical force; and

8 wherein said vertical force moves one member vertically with respect to  
the other member.

2. The self-closing hinge system of Claim 1, further comprising one or more stays

2 coupled to said shaft to secure said first and second leaf members to said shaft.

3. The self-closing hinge system of Claim 1, further comprising a door coupled to

2 one of said members, and a frame coupled to the other said member.

4. The self-closing hinge system of Claim 1, wherein said first leaf member

2 comprises:

a first cylindrical portion; and

4 a door coupling portion adjacent to, and coupled to, said first cylindrical  
portion.

5. The self-closing hinge system of Claim 4, wherein said first leaf member further  
2 comprises:

a top stay edge adjacent to said oblique edge; and

4 a bottom stay edge adjacent to said oblique edge.

6. The self-closing hinge system of Claim 4, wherein said first leaf member further  
2 comprises a generally vertical edge adjacent said oblique edge.

7. The self-closing hinge system of Claim 1, wherein said second leaf member  
2 comprises:

a second cylindrical portion; and

4 a frame coupling portion adjacent to, and coupled to, said second  
cylindrical portion.

8. The self-closing hinge system of Claim 7, wherein said second leaf member  
2 further comprises:

a top stay edge adjacent to said oblique edge; and

4 a bottom stay edge adjacent to said oblique edge.

9. The self-closing hinge system of Claim 7, wherein said second leaf member  
2 further comprises a generally vertical edge adjacent said oblique edge.
10. A self-closing hinge system, comprising:  
2 a first member; and  
a second member rotationally coupled to said first member;  
4 wherein said first and second members each include an oblique edge  
abutting each other, such that a horizontal force on one of the members is translated  
6 into a horizontal and vertical force.
11. The self-closing hinge system of Claim 10, further comprising a shaft coupled to  
2 said first and second members.
12. The self-closing hinge system of Claim 10, further comprising one or more  
2 stops adjacent to said shaft.
13. The self-closing hinge system of Claim 10, wherein said vertical force moves  
2 one member vertically with respect to the other member.
14. The self-closing hinge system of Claim 10, wherein the force of gravity is  
2 translated into a vertical and horizontal force such said first or second leaf member  
returns to a closed position.

15. The self-closing hinge system of Claim 10, further comprising a door coupled to  
2 one of said members, and a frame coupled to the other said member.

16. A self-closing hinge system, comprising:  
2 a first leaf member; and  
a second leaf member rotationally coupled to said first leaf member;  
4 wherein said first and second members are configured such that a  
horizontal force on one of the members is transformed into a horizontal and vertical  
6 force, wherein said vertical force raises one member with respect to the other member.

17. The self-closing hinge system of Claim 16, further comprising a shaft coupled to  
2 said first and second members.

18. The self-closing hinge system of Claim 16, wherein said members are  
2 configured to couple to at least one of a door and a frame.